

U.S. ENVIRONMENTAL PROTECTION AGENCY
POLLUTION/SITUATION REPORT
Lowerline - Removal Polrep
Initial Removal Polrep



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
Region VI

Subject: POLREP #1
Initial Site Walk
Lowerline
A6SK
New Orleans, LA
Latitude: 29.9610719 Longitude: -90.1103340

To: Ronnie Crossland, EPA R6

From: Greg Fife, OSC

Date: 4/30/2019

Reporting Period: 4/30/2019

1. Introduction

1.1 Background

Site Number:	A6SK	Contract Number:	
D.O. Number:		Action Memo Date:	
Response Authority:	CERCLA	Response Type:	Time-Critical
Response Lead:	EPA	Incident Category:	Removal Action
NPL Status:	Non NPL	Operable Unit:	
Mobilization Date:		Start Date:	4/30/2019
Demob Date:		Completion Date:	
CERCLIS ID:		RCRIS ID:	
ERNS No.:		State Notification:	
FPN#:		Reimbursable Account #:	

1.1.1 Incident Category

1.1.2 Site Description

The Lowerline Site is a street in a residential area in the City of New Orleans (City). As recently as 2017, the Department of Energy (DOE) performed radiological sweeps of the area and identified a hot spot on Lowerline Street. Further investigation by Louisiana Department of Environmental Quality (LDEQ) better defined the hot spot as containing radium-226 (Ra-226). Activity measured at the surface indicated a potential source of 1 to 10 milli-Curies (mCi). At the time, the source was believed to be a discrete sealed source. The City worked with LDEQ and hired a contractor to excavate and remove the source.

The contractor excavated 36" x 36" laterally and 30" deep. The excavation did not reveal a sealed source but found contaminated soil below the original pavement level in the street. The contractor isolated, containerized, and shielded the contaminated soil in a drum. A subsequent radiation walking survey found five additional areas of subsurface contamination, which can be consolidated into three areas for reasonable excavation work. The consolidated areas are 5'x5', 10'x20' and 20'x40'. The survey extended the block and the intersecting street until the readings were not elevated. The contractor also surveyed the adjacent properties and did not find any contamination beyond the street.

1.1.2.1 Location

The Site is located on the 3400 block of Lowerline Street, near the intersection of Coolidge Court and bounded by Olive Street and Edinburgh Street. The area is known as Gert Town. It is mostly residential with supporting businesses. The block where the Site is located has several vacant lots and possibly abandoned homes. Xavier University is just two blocks away.

1.1.2.2 Description of Threat

The primary hazardous substance of concern at the Site is the radionuclide radium-226. Ra-226 has been found below the surface in the roadbed. It is mixed or adhering to the soils and shell road base. The pattern of contamination seems to indicate that the dispersion for the Ra-226 was during the initial construction of the road. A grader's blade or tire may have been the mechanical device to spread the Ra-226. Historical records show that the road was initially built in the 1940s or early 1950s. There is no record of the source or the base material or shells used in the construction. There is speculation that the source of the RA-226 could be a damaged sealed source that was dropped or lost on the road as it was built. Other speculation is that it was from the source of the road base or the shells and brought to the road.

Radium-226 is a radionuclide and a hazardous substance according to section 101(14) of CERCLA, 42 U.S.C. § 9601(14) and 40 C.F.R. § 302.4.

1.1.3 Preliminary Removal Assessment/Removal Site Inspection Results

The excavation conducted by the City's contractor found the contaminated soil below two levels of pavement and a seashell road base. Historical records suggest that Lowerline Street was constructed in the 1940s or early 1950s. The Ra-226 was not found in the top 14 inches. The concentration mixed in and below the seashell road was high in Ra-226. Samples showed more than 24,000 pico-Curies per gram (pCi/g), EPA's established cleanup level is 5 pCi/g for this situation.

The survey showed elevated activity above the roadway surface several times above the background and above the action level. During a post excavation gamma survey, the City's contractor detected the activity at 1.5 mR/hr. The background for the area is 0.005 mR/hr (5 microR/hour (µR/hr)). EPA considers an area to be an elevated radiation risk at two times the background or 0.010 mR/hr.

During the excavation, the contractor detected 10,000 mR/hr near the hole as the contamination was reached.

The contractor's survey included the side of the street and part of the adjacent residential yards. The survey did not find any elevated readings in those areas. The contractor surveyed the length of Lowerline St between Olive and Edinburgh Streets and it appears to be beyond the area of contamination.

2. Current Activities

2.1 Operations Section

2.1.1 Narrative

2.1.2 Response Actions to Date

Prior to the 2013 Superbowl played at the nearby Superdome, the Department of Energy (DOE) Radiation Assistance Program Team (RAP) conducted a sweep of the area. The sweep identified the hotspot on Lowerline St. The RAP Triage Report was forwarded to LDEQ for its consideration.

In 2017, another sweep was performed for another event at the Superdome. The RAP again identified the hotspot and characterized it as a 1 to 10 mCi source or Radium-226. The RAP notified LDEQ and the City of New Orleans.

In 2018, the City worked with LDEQ and hired a contractor to conduct a response to the hotspot. In early December 2018, the contractor excavated the spot that had been identified. Although, they were expecting a sealed source, they found contaminated soil and road base. The soil was containerized and shielded and prepared for transportation and disposal.

2.1.3 Enforcement Activities, Identity of Potentially Responsible Parties (PRPs)

2.1.4 Progress Metrics

<i>Waste Stream</i>	<i>Medium</i>	<i>Quantity</i>	<i>Manifest #</i>	<i>Treatment</i>	<i>Disposal</i>

2.2 Planning Section

2.2.1 Anticipated Activities

Excavation and removal of contaminated soil. Replacement of road.

2.2.1.1 Planned Response Activities

Prime contractor to secure vendors and subcontractors.
Mobilization to the Site.
Delivery of shipping containers (rolloffs, lock-tites, b-25s, as appropriate)
Initiate excavation and separation of radiation wastes.
Sample for analysis for RCRA constituents and contamination concentrations.
Profile and acceptance at disposal facilities.
Transportation of waste for disposal.

2.2.1.2 Next Steps

Community Relations.

2.2.2 Issues

2.3 Logistics Section

No information available at this time.

2.4 Finance Section

No information available at this time.

2.5 Other Command Staff

No information available at this time.

3. Participating Entities

No information available at this time.

4. Personnel On Site

No information available at this time.

5. Definition of Terms

No information available at this time.

6. Additional sources of information

No information available at this time.

7. Situational Reference Materials

No information available at this time.